

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING OF FEBRUARY 11, 2005

Prepared on November 24, 2004

Updated on January 18, 2005

ITEM: 26

**SUBJECT: ISSUANCE OF NPDES MUNICIPAL STORM WATER PERMIT
(WASTE DISCHARGE REQUIREMENTS ORDER NO. R3-2004-
0135), CITY OF SALINAS, MONTEREY COUNTY**

KEY INFORMATION

Location: City of Salinas, Monterey County
Discharge Type: Municipal Storm Water
Existing Orders: Waste Discharge Requirements Order No. 99-087

I. SUMMARY

The City of Salinas is required to maintain NPDES permit coverage for its municipal storm water discharges, pursuant to Section 402(p) of the Clean Water Act. The City has been operating pursuant to NPDES Waste Discharge Requirements Order No. 99-087, issued October 22, 1999. NPDES permits are required of all owner/operators of municipal separate storm sewer systems within the incorporated boundary of the City. The permittee has submitted a timely and complete application, therefore the conditions of the expired permit continue in force until the effective date of a new permit.

The Proposed NPDES Waste Discharge Requirements Order No. R3-2004-0135 includes Storm Water Management Plan (SWMP) Revision Requirements, a Monitoring and Reporting Program, and supporting maps and tables. The discharge retains essentially the same character as that regulated by the existing Waste Discharge Requirements (Order No. 99-087). The Proposed Order will ensure reduction of pollutants to the Maximum Extent Practicable

(MEP)¹ in the City's storm water discharges, and thereby protect beneficial uses of surface waters receiving urban runoff.

II. DISCUSSION

The Discussion first describes significant changes to the Proposed Order from the existing Order, then provides background information including the hydrologic setting and beneficial uses, discharge characteristics, and effluent and receiving water limits.

A. Changes to Order. The Proposed Order is modified from the existing permit, as a response to changes in the Federal storm water program, subsequent State Water Resources Control Board precedential orders, case law, analysis of the past five years' sampling results, and lessons learned from implementation of the initial permit. The most significant changes in the Proposed Order include modifications of the City's Storm Water Management Program (SWMP) and of the City's Monitoring and

¹ See Finding No. 16 of Order.

Reporting Program (MRP). The required changes may affect city-wide programs, and often require the City to implement best management practices (BMPs) to the MEP. To support and expedite the City's efforts, and to aid the City in self-determining whether they are meeting the MEP standard, this Discussion section includes resources for the City's use. Summaries of the Proposed Order changes follow. This Discussion provides an overview of the most significant changes. The Proposed Order and its attachments are more detailed.

Storm Water Management Program (SWMP)

Permit Requirement Summary: The City is required to review and modify its SWMP within 180 days of the date of permit adoption, and submit this revised SWMP to the Regional Board for approval. The SWMP is the detailed guidance document that outlines specific BMPs, implementation schedules and other storm water related activities for all aspects of the City.

Background/Justification: The City's first Storm Water Management Program (SWMP) was developed as part of the permit application in 1999 and has not been significantly revised or updated since. This Permit addition requires the City to develop a new SWMP that complies with the reissued Permit.

Resources:

The City could use as an example the City of Sacramento's recently revised SWMP, available online at

<http://www.sacstormwater.org/const/manual/dl-plan.html>

Both the San Diego and Los Angeles storm water programs have also developed model Program guidance.

- San Diego Model Programs
http://www.projectcleanwater.org/html/model_programs.html
- Los Angeles Model Programs

http://ladpw.org/wmd/NPDES/model_links.cfm

The revised SWMP must address the following components:

1. Construction Site Management
2. Development Standards
3. Commercial/Industrial Facilities
4. Municipal Maintenance
5. Illicit Discharge Detection and Elimination
6. Public Education and Participation
7. Program Effectiveness
8. Legal Authority

1. Construction Site Management required changes

Permit Requirement Summary: The construction site management component requires the Permittee to do the following:

- Establish minimum BMP requirements for construction sites greater than or equal to 1 acre. Minimum BMPs include pollutant source controls, including erosion and sediment BMPs that meet proven, current and published standards.
- Update the City's inventory of active construction projects
- Requires the City review construction site storm water pollution prevention plans (SWPPPs)
- Develop and implement a written progressive enforcement policy

Background/Justification: The permit establishes minimum requirements that all sites must follow, but also sets specific minimum construction BMPs that all sites must implement. This establishes a level of certainty for the types of BMPs that construction operators should implement and the types of BMPs that inspectors will look for. Construction operators can implement additional BMPs, but must provide some justification in the SWPPP if one of the minimum construction BMPs is not implemented.

The permit also requires review of SWPPPs and verification that NOIs have been submitted. The justification is that having operators develop one plan (a SWPPP) instead of a plan for the City and a plan for the State (e.g., an erosion control plan and a SWPPP) will minimize confusion and additional paperwork.

The Permittee is also required to develop an escalating enforcement policy. This policy is expected to address sources other than construction, and is referenced in the industrial/commercial and illicit discharge sections of the permit.

Resources:

An example of a construction inspection form used by the Regional Board is available at:

<http://www.swrcb.ca.gov/rwqcb3/SWNEW/PhaseI/Construction/ConstructionInspectionForm.pdf>.

The City of Stockton has developed a model construction SWPPP for construction operators in its community to use. The City also reviews all SWPPPs submitted by construction operators.

<http://www.ci.stockton.ca.us/MUD/stormwater/construction.htm>

Caltrans has developed a number of documents on construction BMPs and construction inspections. These are available at:

http://www.dot.ca.gov/hq/construc/Construction_Site_BMPs.pdf

2. Development Standards Component required changes

Permit Requirement Summary: The Permittee shall develop and submit for public review and comment, and Executive Officer approval, a Development Standards Plan that describes measures to reduce pollutant discharges to the MEP from all new development and significant

redevelopment projects. The Development Standards Plan must be consistent with applicable sections of State Board Order WQ 2000-11 (State Board Order WQ 2000-11 was the basis for the Phase II Attachment 4 Design Standards of the NPDES Storm Water Permit for Small Municipal Separate Storm Sewer Systems). The permit requires the Permittee: a) revise the General Plan as necessary to include storm water quality provisions; b) require maintenance agreements for post-construction BMPs; c) provide annual employee training; and d) provide technical guidance for developers.

Background/Justification: The Los Angeles SUSMP is the model for the development standards permit language. The primary requirement is the creation of a development standards plan that addresses numeric sizing criteria for volume-based and flow-based BMPs. Another significant requirement is on maintenance provisions for structural and treatment BMPs. Background information on these topics is available in the State Board Order WQ 2000-11 and in material developed by the Los Angeles Regional Board in support of the Los Angeles MS4 permit.

Resources:

The following technical papers were developed by the Los Angeles Regional Board in support of the 2001 Los Angeles MS4 Permit and may provide additional information. These papers are available from http://www.swrcb.ca.gov/rwqcb4/html/programs/stormwater/la_ms4_final.html:

- Storm Water Mitigation Requirements for Priority Planning Projects for the Protection of Water Quality - Technical Report (10-01)
- Mitigation of Storm Water Impacts From New Development in Environmentally Sensitive Areas - Technical Report (10-01)
- Retail Gasoline Outlets: New Development Design Standards for Mitigation of Storm Water Impacts -

Technical Report (06-01)

- Supplement to Retail Gasoline Outlet Report (12-01)

City of Los Angeles Storm Water Program has published a “Development BMP Handbook” for Planning Activities (called Part B) that focuses on new development and redevelopment. This handbook can be downloaded from:

<http://www.lastormwater.org/Pages/partb.htm>

The Los Angeles Regional Water Quality Control Board’s web site on SUSMPs is available at:

http://www.swrcb.ca.gov/rwqcb4/html/programs/stormwater/susmp/susmp_details.html

The San Diego Model SUSMP is available at:

http://www.swrcb.ca.gov/rwqcb9/programs/sd_stormwater.html

3. Commercial/Industrial Facilities Component required changes

Permit Requirement Summary: The Permittee is required to add the following to the Industrial Facilities Component of their current SWMP:

- Inventory and inspect all commercial facilities generally believed to have potential pollutant threats to storm water. A list of required types of commercial facilities is included in the Permit.
- Develop, implement, and enforce a commercial discharge management program.
- Develop and require a designated set of minimum BMPs for commercial facility activities.
- Provide annual training program for employees whose positions relate to the commercial facilities component.

Background/Justification: The Permittee currently conducts an industrial facility inspection program. It has become standard practice for Phase I municipalities in their

second and third permit terms to include commercial facilities as part of the inspection and BMP programs. Such requirements are consistent with Code of Federal Regulations section 122.26(d)(2)(iv)(A).

Resources: The following technical papers were developed by the Los Angeles Regional Board in support of the 2001 Los Angeles MS4 Permit and may provide additional information. These papers are available from

http://www.swrcb.ca.gov/rwqcb4/html/programs/stormwater/la_ms4_final.html:

- The Role of Municipal Operators In Controlling the Discharge of Pollutants in Storm Water Runoff from Industrial/Commercial Facilities (11-01)
- Review of Storm Water Quality Task Force BMP Guide for Retail Gasoline Outlets (11-01)
- Compliance Assessment of the Auto Dismantling Industry; Evaluation of the California General Industrial Storm Water Permit (03-01)

BMP Guides for various industries are available from:

1. The City of Los Angeles, <http://www.lastormwater.org/Pages/publctns.htm>

2. The California Stormwater Quality Association, CASQA, Industrial/Commercial BMP Handbook, <http://www.cabmphandbooks.com/Industrial.asp>

3. The City of Stockton, which has developed a model industrial SWPPP, <http://www.ci.stockton.ca.us/MUD/stormwater>

4. The Bay Area Green Business Program “Green Business” certification, <http://www.greenbiz.abag.ca.gov/>.

4. Municipal Maintenance Component

required changes

Permit Requirement Summary: The municipal maintenance component requires the Permittee to add the following:

- Develop a comprehensive storm water collection system inventory, map, and maintenance schedule to address, at a minimum, jurisdictional storm water facilities, roads, and parking lots.
- Conduct annual inspections and reviews of all permittee-owned municipal facilities.

Background/Justification: The municipal maintenance program component will provide the city with a mechanism to adequately conduct routine municipal maintenance activities, training activities to employees whose jobs relate to municipal maintenance, and review/assess the overall program effectiveness.

Resources:

1. The City of Stockton's *Stormwater Maintenance Staff Guide* provides maintenance staff with an easy reference to determine appropriate storm water practices for a variety of activities.
2. The California Stormwater Quality Association, CASQA, Municipal BMP Handbook <http://www.cabmphandbooks.com/Industrial.asp> describes appropriate BMPs.

5. Illicit Discharge Detection and Elimination Component required changes

Permit Requirement Summary: The illicit discharge component requires the Permittee to develop a collection system inventory and map, continue to operate their hotline for illicit discharge reporting, conduct inspections of priority areas for illicit discharges, conduct dry weather screening, address spills, facilitate proper disposal of used oil and toxic materials, and enforce ordinances to eliminate illicit discharges.

Background/Justification: Illicit discharge programs are often reactive instead of proactive. This permit language was drafted

to give the permittees the tools they need to be effective when reactive (e.g., an inventory and map, a hotline) while requiring the Permittee to take some actions that are more proactive (e.g., drive-by inspections of priority areas, dry weather screening). The intent is to develop a program where the Permittee can respond quickly to spills and other needs, but is also preventing incidents by targeting priority areas.

Resources:

An example of an effective dry weather analytical and field screening program can be found in San Diego's *Model Program Guidance for an Illicit Connection/Illicit Discharge Detection and Elimination Program* (available at <http://www.projectcleanwater.org>).

Appendix D of this model program includes *Dry Weather Analytical and Field Screening Monitoring Guidance*. This guidance describes the specific activities the permittees will take to evaluate dry weather flows, includes a dry weather storm drain monitoring data and observation sheet, and lists action levels for when exceedances of field screening and laboratory parameters will trigger follow-up activities.

6. Public Education and Participation Component required changes

Permit Requirement Summary: The public education and participation component requires the Permittee to continue and enhance outreach efforts to target city audiences and activities, such as residential, schools, commercial, businesses, industrial, and small construction. The permit also requires the permittee to conduct public surveys, account for the amount of media impressions, stenciling and signage, as well as the development of an annual meeting with the public.

Background/Justification: This component will provide the permittee with a comprehensive approach to targeting storm water education and participation activities

to the permittee public. This requirement will also provide the permittee annual input towards the effectiveness of the public education and participation program.

Resources: Two documents that could assist in developing a Public Outreach and Public Participation program are available from EPA:

- Getting in Step: A Guide to Effective Outreach in Your Watershed
<http://www.epa.gov/owow/watershed/outreach/documents/getnstep.pdf>
- Getting in Step: Engaging and Involving Stakeholders in Your Watershed
<http://www.epa.gov/owow/watershed/outreach/documents/stakeholderguide.pdf>

The City of Sacramento has developed radio PSAs featuring Sammy the Salmon. These are available at:

<http://www.sacstormwater.org/what/sammy/sammy.htm>

Examples of video PSAs are available from the City and County of Honolulu:

<http://www.cleanwaterhonolulu.com/video.html>

The Alameda Countywide Clean Water Program has developed pollution prevention and storm water brochures for residents and business. These brochures cover a variety of topics and are available at:

http://www.cleanwaterprogram.com/publications_libraryResources.htm

An example public awareness telephone survey is available from San Diego County at:

http://www.projectcleanwater.org/pdf/Carlsbad/public_awareness_03_car_slr.pdf

7. Program Effectiveness required changes

Permit Requirement Summary: The Proposed Order requires the Permittee to assess the effectiveness of the SWMP

components in each Annual Report.

Background/Justification: This component enables the City and Regional Board staff to evaluate current practices, and determine if changes are warranted. The overall goal of such evaluations is a continual improvement in water quality protection efforts.

Monitoring and Reporting Program Requirements

“Monitoring and Reporting Program Requirements,” Attachment 5, of the Proposed Order requires substantial changes in the existing monitoring and sampling program. In summary, the proposed Monitoring and Reporting Program (MRP) requires the City to sample Background and Receiving waters for storm water pollutants of concern, for water and sediment toxicity, and for benthic invertebrate assemblages. Background water is defined as surface water at the point of entry into the City, which includes waters that may have existing impairments from upstream users. Background and Receiving water data are compared to one another, and the results may drive the need for further sampling within the city boundaries if the data indicates that municipal pollutant sources are present. This sampling approach differs from the existing requirements, in which water sampling sites are concentrated primarily on three (3) short creek segments within the City, and pre-determined sampling constituents are relied upon in an effort to locate pollutant sources. No water toxicity studies are required in the existing Permit, therefore it is difficult to determine the true effect of storm water discharges on aquatic life. Additionally, the existing Permit uses a water quality Reference Station, located upstream of all defined human land uses and does not characterize surface water quality flowing directly into the City. The following Table 1 provides a summary of the existing and proposed programs. Regional Board staff have included a more detailed discussion of the Monitoring and Reporting changes in “Part VIII. Monitoring and Reporting Program” of this staff report. Decisions regarding changes in the new permit were also driven by sampling results from the

past permit term. Please refer to the extensive discussion on data analysis from the past permit term, in the “IV. Previous Permit Term

Sampling Results and Discharge Characteristics” section of this staff report

Table 1			
1999 Permit		2004 Permit	
<u>No. of Sites</u>	<u>Site Locations</u>	<u>No. of Sites</u>	<u>Site Locations</u>
21 Sites	6 on Gabilan Creek 6 on Natividad Creek 4 on Santa Rita Creek 4 on the Reclamation Ditch 1 Background (un-impaired, “native” water, located on Gabilan Creek, upstream of the City and agriculture lands)	4 sites required 4 additional sites if sampling data indicates need.	3 receiving water sites 1 background site (directly upstream, and indicative of water quality entering the city) Additional background site data to be incorporated from the Agriculture Waiver Program Urban Discharge sites
	<u>Sampling Frequency</u> Sample all sites, 1/year (if doing biological assessment), to 2/year (if no biological assessment) for: In-situ measurements Lab analysis Sediment toxicity		<u>Sampling Frequency</u> Sample Background + Receiving water sites, 2/year for: In-situ measurements Lab analysis Sediment toxicity Water toxicity
	Biological assessment on all sites when conducting water quality monitoring only once per year.		Sample Background + Receiving water sites, 1 / year for: Biological assessment (benthic invertebrates)
			Urban Discharge sites: <ul style="list-style-type: none"> • Dry season visual monitoring. • In-situ sample 1 / year if indicated by receiving water samples • Lab sample 2 / year if indicated by receiving water samples

III. BACKGROUND INFORMATION

Hydrologic Setting

The City is situated in the northern part of the Salinas Valley in Monterey County, approximately ten miles east of the Pacific Ocean and adjacent to the Salinas River.

Surface water bodies flowing through the Salinas area include Natividad Creek, Gabilan Creek, Santa Rita Creek, and Alisal Creek. Alisal Creek is renamed the Reclamation Ditch within the City. In addition, Carr Lake, a dry lakebed within the City, functions as a retention basin and buffers flows to the Reclamation Ditch. The City primarily

discharges storm water to the Salinas River, and the Reclamation Ditch. The Reclamation Ditch flows west from the City, paralleling the Alisal Slough and eventually discharges to the Tembladero Slough. Salinas City storm water eventually discharges to the Pacific Ocean at the downstream end of the Elkhorn Slough and Moro Cojo Slough estuary system near Moss Landing.

The permitted area is delineated by the incorporated area of the City. Storm water discharges from urbanized areas consist mainly of surface runoff from residential, commercial, and industrial developments. In addition, there are storm water discharges from agricultural land uses including farming operations. However, the Clean Water Act specifically exempts agricultural discharges from regulation under this program. Certain areas within the permit boundary and not under the City's jurisdiction (such as areas owned/operated by State, County, and Federal agencies) are excluded from the area requested for coverage under this permit application. Other owners of municipal separate storm sewer systems within the permit boundary include Caltrans and Monterey County. These entities are subject to separate storm water permits.

Beneficial Uses

Storm water flows discharged to municipal storm drain systems in the City are tributary to those waterbodies described above. The beneficial uses of these water bodies, as stated in the Basin Plan, include municipal and domestic supply, agricultural supply, groundwater recharge, water contact recreation, non-contact water recreation, wildlife habitat, cold fresh water habitat, warm fresh water habitat, spawning, reproduction, and/or early development, preservation of biological habitats of special significance, rare, threatened, or endangered species, estuarine habitat, migration of aquatic organisms, freshwater replenishment, and commercial and sport fishing. The ultimate goal of the municipal storm water permit is to protect the beneficial uses of receiving waters.

IV. PREVIOUS PERMIT TERM

SAMPLING RESULTS AND DISCHARGE CHARACTERISTICS

1. Urban areas provide pollution sources. Development and urbanization increase pollutant load, volume, and discharge velocity over background levels. The common result of increased impervious surfaces in urban areas, is that urban pollutants are quickly and efficiently carried to natural water bodies, and increased runoff volumes result in increased erosion rates of receiving waters.
2. Urban pollutants of concern that may be contained in storm water include, but are not limited to: certain heavy metals; sediments; pathogens; petroleum hydrocarbons; polycyclic aromatic hydrocarbons (PAHs), trash, and pesticides; herbicides; and nutrients that cause or contribute to the depletion of dissolved oxygen and/or toxic conditions in the receiving water. Excessive flow rates of storm water may cause or contribute to downstream erosion and/or excessive sediment discharge and deposition in stream channels. The quality and quantity of MS4 discharges may vary considerably because of the effects of hydrology, geology, land use, season, and sequence and duration of precipitation events.
3. Water quality sampling for the 1999 Salinas Permit was conducted on 20 receiving water sites within the City, and one Reference Station located on Gabilan Creek upstream of urban and agriculture land uses. Sample events occurred over four years, in May and December 2000, April and November 2001, June 2002, and January and June 2003.
4. Sample sites - The sampling program over the last permit term had 20 sites within the City. Sixteen (16) of the 20 sites were located in primarily residential land use areas (Figure 1 – Sampling Locations, 1999 Permit, attached). The City's initial Permit application identified these watersheds as being the lowest priority for sampling. The remaining four (4) of the 20 sample sites are located along the Reclamation Ditch, which collects runoff primarily from industrial and commercial areas, and was identified as high priority for sampling in the initial Permit

application. Thus, due to the concentration of sampling sites in residential areas, the results from the original sampling program focused on water quality in these areas, more than the industrial and commercial areas, despite the City's assertion that residential areas were lower priority.

5. Water quality sampling over time – First-permit term water quality sampling values displayed a high degree of variability over the stream reaches for each sampling event, and over the four year sampling time. There do not appear to be definitive trends (improvement or degradation) in water quality over time. This conclusion is based on a visual, rather than a statistical analysis of the data.
6. Water quality constituents analyzed along stream reaches – Although storm water regulations, the past Permit, and Proposed Order do not require numeric discharge or receiving water limits (see discussions below), Regional Board staff have compared the past permit water sampling results with water quality values from the Reference Station (located on Gabilan Creek upstream of the City), and with benchmark water quality levels. The benchmark levels were taken from Basin Plan Water Quality Objectives, Central Coast Ambient Monitoring Program (CCAMP) attention levels, and US EPA standards. Regional Board staff examined water quality sample results for those sampled parameters² which have established numeric values that pertain to the creeks' beneficial uses (benchmark-referenced parameters). Staff compared the inter-city data to the reference site data in order to make a rough analysis of whether urban areas are contributing to, improving, or impairing storm water runoff quality. Staff found that the Reference Station exceeded benchmark levels at least 30% of the time for four (4) of the parameters: pH, dissolved oxygen, orthophosphate, and fecal coliform. Staff decided to compare inter-city samples to

the Reference Station samples in all of the benchmark-referenced parameters except for those four (4) parameters in which the Reference Station exceeded benchmark values. Regional Board staff recognize that one Reference Station on Gabilan Creek is not a perfect background source for comparison with the entire city. Additionally, there are only seven (7) sample events for the Reference site, however this analysis provides some insight into the urban contribution to water quality. There were at least 120 sample points for each of the inter-city water quality parameters. Data comparison is summarized in Table 2 (following page).

² Water quality sampled parameters which have benchmark values: pH, dissolved oxygen, turbidity, conductivity, nitrate as N, nitrate as NO₃, orthophosphate, total suspended solids, total dissolved solids, total coliform, and fecal coliform.

7.

Table 2							
Comparison of Reference Site and Inter-City Site Values to Benchmark Values							
Parameter:	Turbidity	Conductivity	Nitrate as N	Nitrate as NO3	Total Suspended Solids	Total Dissolved Solids	Total Coliform
Percentage of samples exceeded benchmark at Reference Site (n=7)	17%	0	0	0	0	0	14%
Percentage of samples exceeded benchmark at inter-city sites (n>=120)	72%	84%	46%	50%	11%	83%	64%

Table 2 demonstrates that water quality at the Reference Station was within the benchmark values for most of the samples³. By comparison, the inter-city sites exceeded the benchmark values at least 46% of the time in six (6) of the seven (7) parameters. From this data, one might hypothesize that there are significant urban sources for the analyzed parameters. Regional Board staff conducted further analysis on the water quality data, in order to evaluate this hypothesis. Each of the inter-city stream reaches has one sample site at the upstream City boundary. The furthest upstream site is actually a more accurate indicator of water quality entering the City than the Reference Station. Staff summarized the trends in water quality measurements over each of the stream reaches by comparing the upstream to the downstream sampling values. Table 3 (following page) shows the results. An “increase”, means that the measured values increased over the stream reach from upstream to downstream, which indicates an urban source of the constituent. “Decrease” in values indicates water quality improved further downstream within the City.

³ As described in item #6 of this section, pH, dissolved oxygen, orthophosphate and fecal coliform were not used in the Table 2, “Comparison of Reference Site and Inter-City Site Values to Benchmark Values” analysis, because the Reference Station samples exceeded benchmark values in at least 30% of these sampled constituents.

Table 3							
Creek Water Quality Trends Over Sampled Creek Segments							
Parameter:	Turbidity	Conductivity	Nitrate as N	Nitrate as NO3	Total Suspended Solids (TSS)	Total Dissolved Solids (TDS)	Total Coliform
Santa Rita Creek (28 samples)	Increase	No trend	No trend	No trend	No trend	No change	No change
Gabilan Creek (30 samples)	Decrease	Increase	Increase	Increase	Decrease	Increase	No trend
Natividad Creek (37 samples)	No trend	No trend	Decrease	Decrease	Decrease	No trend	No trend
Reclamation Ditch (28 samples)	Decrease	No trend	No trend	No trend	No trend	No trend	No change

8. In 11 out of 28 cases (39%) the creek-parameter summaries showed definite trends (Increase or Decrease) over the creek reaches. Only 18% of these summaries indicated there were urban contributions (Increases) of the constituent: turbidity on Santa Rita Creek; and conductivity, nitrate as N and NO3, and TDS on Gabilan Creek. Conversely, 61% of the analyses were inconclusive or showed no change over the length of the creek.
9. The data in Table 3 indicates that urban pollutant sources are not necessarily as ubiquitous as the Table 2 comparison with the Reference Site might indicate. Additionally, the densely concentrated sampling points along Santa Rita and Natividad Creeks have not resulted in an excessively detailed picture of water quality changes over the sample area, or over time (discussed above). Although the Reclamation Ditch sample points are not as concentrated (spatially), there were no trends seen in any of the parameters with the exception of turbidity which improved over the Ditch length. Gabilan Creek samples show more promise in locating urban pollutant sources.
10. Regional Board staff conclude from this analysis that, overall, the current sampling program has not been successful in identifying pollutant sources or trends over time. The exception to this conclusion may be

found in the Gabilan Creek inter-city data, which indicates urban sources for conductivity, nitrate, and TDS, and Santa Rita Creek turbidity. This data analysis supports the changes proposed by the MRP of the Proposed Order, including a focus on the overall impact of urban runoff on receiving waters, followed by more intensive inter-city investigations if initial background-receiving water samples indicate an urban pollutant contribution (details of the proposed MRP are discussed below in section VIII. Monitoring and Reporting Program).

V. DISCHARGE PROHIBITIONS

The proposed order prohibits the discharge of storm water to the City’s storm drain systems as follows:

- a. Discharges from MS4s in a manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance (as defined in §13050 of the California Water Code) in waters of the State of California are prohibited.
- b. Discharges from MS4s that cause or contribute to the violation of water quality objectives or water quality standards are prohibited.
- c. Discharges from MS4s containing pollutants that have not been reduced to the Maximum Extent Practicable (MEP) are prohibited.

The order also requires the City to effectively prohibit the discharge of non-storm water (any discharge not made up entirely of storm water) to its storm drain system. However, NPDES permitted discharges and certain non-storm water discharges (specifically listed in Discharge Prohibition A.2) which are not expected to be sources of pollutants are not prohibited by the proposed order. Examples of such non-storm water discharges include landscape irrigation flows, diverted stream flows, rising ground waters, air conditioning condensate, footing drains, dechlorinated or debrominated swimming pool discharges, and fire hydrant flow testing. Any such discharges, which are determined by the City or the Regional Board Executive Officer to be sources of pollutants, or cause or contribute to violations of water quality objectives, are prohibited.

VI. EFFLUENT DISCHARGE LIMITATIONS

Numerical and narrative water quality objectives exist for receiving waters in the Central Coast Region. However, due to the variability in storm water quality and quantity and the complexity of urban runoff, the impact of urban storm water runoff discharges on water quality or receiving waters has not been fully determined. Therefore, the Proposed Order does not contain numerical effluent limitations for specific constituents. The Permittee's storm water discharges may not, however, cause or contribute to an exceedance of a receiving water quality objective contained in the Basin Plan or other statewide plans or policies. The Code of Federal Regulations (40 CFR 122.26(d)(2)(iv)) requires storm water permittees to implement BMPs to reduce pollutants in storm water discharges to the maximum extent practicable. BMPs are described in the Permittee's SWMP. This Order requires ongoing assessment and annual reporting on the implementation and effectiveness of the BMPs.

VII. RECEIVING WATER LIMITATIONS

1. Discharges from MS4s that cause or contribute to the violation of water quality standards of Receiving Waters are

prohibited. Discharges from the MS4 of storm water, or non-storm water for which a Permittee is responsible, shall not cause or contribute to a condition of nuisance in Receiving Waters.

2. The City shall comply with the above discharge prohibitions, effluent discharge limitations, and receiving water limitations through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with the SWMP. Due to the unique aspects of managing storm water discharges through storm drain systems (intermittent discharges, difficulties in monitoring, limited physical control over the discharge, etc.), the City must evaluate the effectiveness of BMPs annually and determine whether the implemented BMPs are adequately protecting receiving waters. If exceedance(s) of water quality objectives persist notwithstanding implementation of the SWMP, the City shall assure compliance with the discharge prohibitions and receiving water limitation by complying with the following procedure:
 - a. Upon a determination by either the Permittee or Regional Board that discharges are causing or contributing to an exceedance of an applicable water quality standard, the Permittee shall submit a Report of Water Quality Exceedance (Report of Exceedance) to the Regional Board that describes BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of water quality standards. The Report of Exceedance shall include proposed revisions to the SWMP and an implementation schedule for new or improved BMPs, if applicable. The Regional Board may require modifications to the Report of Exceedance, and has 30 days in which to approve the report.
 - b. The Permittee shall implement the revised SWMP and monitoring

program in accordance with the approved schedule.

If the Permittee has complied with the procedures set forth above and are implementing the revised SWMP, the Permittee does not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless directed by the Regional Board to develop additional BMPs.

VIII. MONITORING AND REPORTING PROGRAM

The significant changes in the sampling component of the Monitoring and Reporting Program (MRP) are summarized above, in Section II.A, Table 1. The City has been implementing a monitoring and reporting program as required by the existing Permit. The existing program will remain in effect until a new MRP is adopted. The Proposed Order contains a new MRP (Attachment 5 of the Proposed Order). The intent of both the existing and proposed MRPs is to identify problem areas and ultimately eliminate pollutant source(s). The proposed MRP focuses on comparing incoming water quality (directly upstream of the City), with receiving water quality (immediately downstream from the City), in order to identify the overall urban impact on water quality. The basic sample constituents and timing of the proposed program are consistent with the *Monitoring and Reporting Program for Dischargers Enrolled Under Conditional Waiver of Waste Discharge Requirements for Discharges From Irrigated Lands* (Agriculture Waiver Program). However, the City is also required to sample for urban-source pollutants in addition to the Agriculture Waiver Program sample constituents. The reason for the match between the two monitoring programs is that agriculture is the primary land use upstream of, and discharging to the City. The Agriculture Waiver Program will require water quality sampling immediately upstream of the northeast and southern City boundaries in order to characterize potential pollutants flowing from agriculture lands, into the City. The City is encouraged to use this data in conjunction with the water quality data

collected for this Storm Water Permit MRP. The proposed MRP constituent sampling requirements were also designed to match as closely as possible, the Monterey Bay Marine Sanctuary's "Urban Watch," "First Flush," and "Snapshot Day" sampling programs, and the EPA Storm Water Phase II list of pollutants of concern. The combined sampling programs' water quality data will provide a comprehensive picture of background water quality (water quality entering the City), City water quality contributions or improvements, and an understanding of how city runoff compares with regional data.

The original monitoring program required sampling at prescribed sites for predetermined constituents. The results were mixed, in terms of usefulness, for determining pollutant sources, as described in detail under the "IV. Previous Permit Term Sampling Results and Discharge Characteristics" section of this Staff Report. The proposed MRP initially relies on sample points directly upstream and downstream of the City in order to characterize the overall impact of the commingled urban runoff sources. The proposed MRP also utilizes an iterative approach to identifying, sampling for, and eliminating pollutants. The iterative process requires the City to: First, fully implement BMPs and pollutant source control; Second, take water quality samples, water and sediment toxicity samples, and benthic invertebrate surveys of the background and receiving waters in order to get a "big picture" view of the City's impacts on water bodies; and, third if needed, add increased levels of BMPs, source control, and add inter-city sampling (urban discharge sites) in an effort to locate and eliminate pollutant sources. The increased sampling of urban discharge sites is triggered if pollutant levels in receiving water samples exceed sample values from background sites. The MRP section B(3)(a)(iii) and B(3)(b)(iii) have additional requirements if samples exceed Basin Plan water quality objectives, CCAMP attention levels, or are outside of sampling ranges typical for the site. This iterative, source-control based MRP parallels the purpose and intent of the Federal storm water regulations,

and should provide the most sensible use of resources.

The proposed order requires the City to submit an electronic and hard copy Annual Report by October 1 of each year (Order section D.4). Reporting requirements are described in the Monitoring and Reporting Program, section E.1. In summary, the Annual Report will provide an assessment of program effectiveness, a review of program implementation including compliance with the time line of due dates (Attachment 6, "Due Dates Table" of the Order), a summary and analysis of monitoring results and pollutant loading, a description of storm water management program modifications, a fiscal analysis for funding storm water management activities, a draft Work Plan for implementation of the storm water management program for the next year, and other items as needed to analyze the success of the program.

IX. EDITS TO THE 2004 PROPOSED ORDER AND ATTACHMENTS

Regional Board staff have made some revisions to the originally circulated Proposed Order and its Attachments. Revisions are a result of comments received by interested parties, as well as grammatical edits and clarifications. In the following segments additions are underlined, and ~~deletions are crossed out~~.

1. Proposed Regional Board hearing date has been changed in all documents from December 3, 2004, to February 11, 2005.
2. Order Findings #2 should read:

This Order is based on the federal Clean Water Act, the Porter-Cologne Water Quality Control Act (Division 7 of the Water Code, commencing with Section 13000), applicable state and federal regulations, all applicable provisions of statewide Water Quality Control Plans and Policies adopted by the State Water Resources Control Board, and the Regional Water Quality Control Plan (Basin Plan) adopted by the Regional Board, ~~the California Toxics Rule, and the~~

~~California Toxics Rule Implementation Plan.~~

3. Order "Discharge Prohibitions" #8 is corrected as follows:

The Permittee shall examine all dry weather analytical monitoring results collected in accordance with the Monitoring and Reporting Program required by this Order to identify water quality problems that may be the result of any non-storm water discharge, including any non-prohibited discharge category(ies) listed in Discharge Prohibition No. A.5~~Finding No. 5~~ of this Order (page 74)...

4. "Storm Water Management Program Revision Requirements", (Attachment 4 of the Order) Section II.A.iv should read:

Erosion from slopes and channels shall be controlled by implementing an effective combination of erosion control (source control) and other BMPs as described in the San Francisco Regional Water Quality Control Board's Erosion and Sediment Control Field Manual, the California Stormwater Quality Association's Construction Stormwater BMP Handbook, or equivalent manual.

5. Monitoring and Reporting Program, section B.3.a.ii.b. has been revised to read:

Wet season storm sampling should target the rising limb of the storm's hydrograph. peak flow of the storm. Whenever possible, monitoring events shall be conducted on the same day for all sites, starting with upstream sites first, and moving down the watershed. Because of the variable nature of storm water runoff, the Permittee is strongly encouraged to collect and analyze a time-series sample from each background and receiving water site. Ideally the time-series would include three (3) samples gathered from the same location at half hour increments. The three (3) samples may then be combined (composite sample) or analyzed

separately. The Permittee may use trained volunteers to assist with sample collecting.

6. Monitoring and Reporting Program, Section B.3.a.ii.e, has been revised to read:

The Permittee shall collect flow data at the time of sampling for all monitoring stations sampled during a given year. Flow may be estimated using U.S. Environmental Protection Agency (USEPA) methods⁴ at sites where flow measurement devices are not in place. The Permittee shall use flow data, combined with cross sectional area of sample site, and pollutant concentrations to calculate pollutant loads (refer to the Monitoring and Reporting Program, Section VIII. Program Effectiveness, and Section E.1.6 of this report).

7. Monitoring and Reporting Program, section B.3.a.ii.f should read:

Urban Discharge sites shall be visually inspected four times per year ~~quarterly~~ during the dry season (typically, but not prescriptively, April 15 through October 15) non-runoff events in order to monitor for non-storm water discharge.

8. Monitoring and Reporting Program, section B.3.iii (page 5) should read:

If pollutant levels of the receiving water samples exceed: a) water quality objectives b) CCAMP attention ~~action~~ levels; c) Background site water quality measurements; or d) if sampling results exceed sampling ranges typical for the site, then the Permittee shall follow the investigative steps equivalent to those described in the Toxicity Reduction Evaluation, Section B.3.b.iii, below. Should item c) "Background site water

quality measurements," be exceeded by receiving water quality values, then the Permittee is also required to do additional sampling as described in the "Salinas Permit Sampling Requirements Flow Chart," included with this document.

9. See changes in Table 1, Table 2, Table 4, and "Salinas Permit Sampling Requirements Flow Chart" of the Monitoring and Reporting Program.

10. See change in Sampling Requirements Flow Chart, attached to the Monitoring and Reporting Program.

X. ENVIRONMENTAL SUMMARY

In accordance with California Water Code Section 13389, the issuance of waste discharge requirements for this discharge is exempt from those provisions of the California Environmental Quality Act contained in Chapter 3 (commencing with Section 21100), Division 13, of the Public Resources Code.

The Regional Board has considered the antidegradation requirements, pursuant to 40 CFR 131.12 and State Board Resolution 68-16, for these storm water discharges. The existing order includes a finding that storm water discharges would be consistent with antidegradation requirements. The Regional Board finds the pollutant loading rates to the receiving waters will be reduced with the implementation of the requirements in this order as compared to discharges under the existing order. As a result, the quality of storm water discharges and receiving waters will be improved, thereby protecting the beneficial uses of waters of the United States. This is consistent with the federal and state antidegradation requirements.

IX. COMMENTS

An initial proposed order, monitoring and reporting program, Storm Water Management Plan Required Revisions, and attachments were posted to the Regional Board website and a notice was mailed on September 7, 2004 to all persons listed on the interested parties

⁴ NPDES Storm Water Sampling Guidance Document, USEPA 833-B-92-001, July 1992

list. Comments were received from the National Oceanic and Atmospheric Administration, Monterey Bay National Marine Sanctuary (MBNMS) in a letter dated November 10, 2004 (Attachment 3 of this Staff Report), and changes were made to the Order and related documents.

The revised Order with attachments, and this Staff Report without public comments were posted to the Regional Board website, mailed and emailed to interested parties on November 24, 2004. The City of Salinas, and the Ocean Conservancy, and the MBNMS responded within the public comment due date of December 30, 2004. Comments from these parties have been addressed in this Staff Report. Then appropriate Regional Board staff summarize comments and grouped them by similar subject. Summarized comments (not necessarily in the same order as the letters) are *italicized*. Regular font sections are Regional Board responses.

A. Monterey Bay National Marine Sanctuary comment letter, November 10, 2004 (Attachment 8 of this Staff Report)

Most items from this letter were addressed in the November 24, 2004 revised Order, attachments and Staff Report. The following items will complete Regional Board staff's response to the November 10, 2004 letter:

1. E. Coli bacteria and Nitrate as N were added to the Table 2 list of dry weather sampling constituents
2. Table 4 has been modified under the heading "Sample Type," Zinc will be a "Grab" sample, not "In situ" sample
3. Table 1 includes footnote 4, and the Flow Chart language; both are added to clarify that the toxicity sampling component of the MRP will remain in effect whether or not wet weather sample modifications are made (as allowed in the MRP).
4. The following statement was added to the MRP, Section B.2.b, "However, in order for the Agriculture Waiver Program data to be of greatest use for comparison with City data, water quality samples should be collected on the same day for both programs.

Regional Board staff are willing to help with coordination between the two groups." It is in the City's best interest to coordinate sampling days to match the Agriculture Waiver Program sampling, if the City would like an accurate representation of what background water quality is entering the City.

B. City of Salinas, December 17, 2004 comment letter (Attachment 9 of this Staff Report). The comments and responses are as follows (comment numbering continued from above):

5. *The Draft Permit's Attachment 4, "Storm Water Management Program Revision Requirements" contains extensive prescriptive requirements. Having prescriptive requirements violates California Water Code section 13360.*
6. *Draft Permit requirements go far beyond what is required to address the City's impacts to water quality.*
7. *The proposed Permit will require an additional annual expenditure of \$1.3 million to implement and enforce. This is money that the City does not have. The Draft Permit does not explain how cost was factored into the determination that complying with the Permit would satisfy MEP.*

Response to comments No. 5, 6 and 7 – The City's comments indicate that the expected increase in costs are derived from implementing BMPs that have been prescribed specifically by the Regional Board in the Permit. In fact, the Permit does not specify what structural BMPs must be used, or how the City must meet the program elements. Attachment 4 of the Permit does include descriptions of the specific revisions that must be made to the SWMP (termed "program elements" in the Permit). The program elements parallel the minimum measures that are required to be addressed by rapidly growing smaller municipalities or those with populations above 50,000 in the Phase II Storm Water Permit, with insignificant differences. (See Phase II General Permit,

Attachment 4.) Thus, many municipalities much smaller than Salinas must implement the same requirements.

Water Code Section 13360 clearly provides a restriction on the ability of the Regional Boards to dictate the manner of compliance with State requirements. However, Water Code Section 13377 provides that, notwithstanding Section 13360, the Regional Boards shall issue waste discharge requirements that ensure compliance with all applicable provisions of the Clean Water Act (CWA). Because the permit seeks to implement CWA requirements, it does not violate Section 13360 to include specified programs that the permittee must implement to carry out CWA requirements. This is all the more necessary due to the elimination of numerical limits from the permit. Reliance on BMPs requires specification of those programs that are relied upon to reduce pollution. Consistent with the CWA, Attachment 4 of the permit merely specifies the programs the Permittee must implement, but does not specify the “design, location, type of construction, or particular manner in which compliance may be had” with the programs, except to the extent necessary to comply with the CWA.

The Permit requires the City’s revised SWMP to target pollutants or pollutant sources that have been identified as critical by the State Water Resources Control Board (State Board) as reflected in State Board Order No. WQ 2000-11 (“SUSMPs Order”). The State Board affirmed the appropriateness of these measures when it issued the Phase II Storm Water Permit in 2003. The Phase II Permit Fact Sheet states: “The MEP standard applies to all regulated MS4s, including those in Phase I ... Consistent with U.S. EPA guidance, the MEP standard in California is applied so that a first-round storm water permit requires BMPs that will be expanded or better-tailored in subsequent permits.”

The eighth category in the Permit, “Legal Authority” requires that the City demonstrate that it establish, maintain, and enforce adequate legal authority to control pollutant discharges into and from its MS4. This

requirement is consistent with 40 CFR §122.26(d)(2)(i).

The City comment letter several times brings up concerns about funding and costs associated with the Proposed Permit requirements (presumably including the MRP). While writing the Proposed MRP, Regional Board staff was very aware of the City’s fiscal crisis, and that the monitoring component of this and many permits can be very costly. In drafting the Proposed MRP, Regional Board staff carefully considered whether the Proposed MRP requirements would be a cost-effective way to help the City identify pollutant sources, and, if possible, tie into regional sampling programs. Regional Board staff feels the MRP as designed should provide a comprehensive view of the impacts directly attributable to City and would allow the City to save on resources by tying in with other programs. The Proposed MRP is matched very closely to the Agriculture Waiver Program, the Monterey Bay Marine Sanctuary’s “Urban Watch,” “First Flush,” and “Snapshot Day” sampling programs, and the EPA Storm Water Phase II list of pollutants of concern. The City is encouraged to use background data that will be collected by the Agriculture Waiver participants, and the volunteer monitoring efforts as a way to save money and other resources. In addition to linking with regional programs, the Proposed MRP utilizes an iterative approach that adds additional sampling only if problems are discovered in the initial “big picture” sampling. The increased sampling of urban discharge sites is triggered if pollutant levels in receiving water samples exceed sample values from background sites. The MRP sections B(3)(a)(iii) and B(3)(b)(iii) have additional requirements if samples exceed Basin Plan water quality objectives, CCAMP attention levels, or are outside of sampling ranges typical for the site. Utilizing an iterative approach based on findings from initial overview sampling is much less costly than requiring a full-scale sample program up front. The iterative sampling program is also consistent with the Federal and State Storm Water Program’s iterative approach to storm water pollution discovery-and-solution methodology. The MRP’s costs are not part of

the cost consideration that goes into determining whether BMPs and other controls constitute MEP. The cost savings the City will realize from the revised MRP, however, will free up City funds that can be used to implement other parts of their storm water program.

The SUSMPs Order states:

These definitions [of MEP] focus mostly on technical feasibility, but cost is also a relevant factor. There must be a serious attempt to comply, and practical solutions may not be lightly rejected. If, from the list of BMPs, a permittee chooses only a few of the least expensive methods, it is likely that MEP has not been met. On the other hand, if a permittee employs all applicable BMPs except those where it can show that they are not technically feasible in the locality, or whose cost would exceed any benefit to be derived, it would have met the standard. MEP requires permittees to choose effective BMPs, and to reject applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the cost would be prohibitive. Thus while cost is a factor, the Regional Water Board is not required to perform a cost-benefit analysis. (SUSMPs Order, p. 20.)

The State Board already considered cost when it issued the SUSMPs Order and Attachment 4 of the Phase II Permit and determined that these measures constitute MEP. The City of Salinas has not provided any evidence that distinguishes it from other permittees. The cited language makes clear that it is incumbent upon the permittee to demonstrate that its BMPs meet the MEP standard, including the cost factor.

8. *The City asks why the Los Angeles SUSMP was used as a model for this*

Draft Permit. (page 7, reference II.A.2).

Response to Comment No. 8 – In a December 26, 2000 memorandum from the State Board Office of Chief Counsel to the RWQCB Executive Officers, Craig Wilson, Chief Counsel, stated that the State Water Board “adopted a precedential decision concerning the use of Standard Urban Storm Water Mitigation Plans (SUSMPs) in municipal storm water permits (Order WQ 2000-11, or SUSMP decision).” Order WQ 2000-11 arose from the Los Angeles Storm Water Permit. The Order found that the provisions in the SUSMPs, as revised in the Order, constituted MEP. The Order also discussed areas where the Regional Water Boards may exercise more discretion. The Chief Counsel memorandum stated that all MS4 permits should include the SUSMPs requirements. The City recognizes this in other comments in its letter. (See page 6, n.3 and n.4.) The SUSMPs requirements also served as the basis for Attachment 4 of the Phase II MS4 General Permit, Order No. DWQ 2003-0005.

9. *The City questions Draft Permit Attachment 4 requirements that specified Development Standards be applied to the following categories (pages 6-7):*
- a. *Home subdivisions with 10 housing units;*
 - b. *Commercial developments of 100,000 square feet or more including all hospitals and educational facilities. The City points out that it has jurisdiction over private, but not public, hospitals or educational facilities, and requests that the Proposed Permit wording reflect this limitation;*
 - c. *Projects creating or adding at least 5,000 square feet of impervious surface;*
 - d. *Retail Gasoline Outlets category (III.c.i.8) should be deleted because RGOs are already heavily regulated; and*
 - e. *Paved road over five acres category (III.c.i.7) should be deleted because it is not included in Alameda, Contra Costa, and San Mateo county permits, and is not included in the “Bellflower decision.”*

Response to Comment No. 9 – State Water Resources Control Board Order WQ 2000-11

determined that MEP required Development Standards for the following categories: 1) Home subdivisions with 10 to 99 housing units; 2) 100,000 square foot commercial developments; 3) parking lots of 5,000 square feet or more, or with 25 or more parking spaces; 4) four other listed categories; and 5) redevelopment projects that are within one of the aforementioned categories are included if the redevelopment adds or creates at least 5,000 square feet of impervious surface to the original developments. Order WQ 2000-11 allows broader discretion by the Regional Water Boards to decide whether to include additional types of development “include(ing) retail gasoline outlets, ministerial projects..., and projects in environmentally sensitive areas.” The Phase II Storm Water Permit adds the retail gasoline outlet category as a requirement for Development Standards application. The Phase II Permit states, “Fueling areas have the potential to contribute oil and grease, solvents, car battery acid, coolant and gasoline to the storm water conveyance system.” Regional Board staff agree that retail gasoline outlets have a significant potential to contribute pollutants to storm water, and therefore the Design Standards for these businesses are justified.

The five acre “paved road” category was included because it is a well accepted principle that roadways contribute significant pollutants and greatly increase the runoff potential as compared to any non-paved landscape⁵. The increased runoff effectively carries pollutants from the roadways, to the storm drains and receiving lands or waters, and also increases the chance of erosion in non-paved areas. Development Standards would minimize the negative impact of roadway runoff to the storm water/receiving water system. A five-acre criteria mimics the Phase I Construction Storm Water General Permit requirements for BMPs for any five-acre construction site. (The Phase I Construction requirements are now superceded by the more stringent Phase II Construction requirements for one acre sites). The construction storm water program recognized that there was a significant

potential for increased pollutants from five-acre sites, especially as the site’s imperviousness tended to increase with most construction projects. The Phase II Construction Permit now requires permitting and BMP implementation for sites of one-acre or more. This Permit recognizes that the potential for storm water pollution from a five-acre paving project will result in long term storm water impacts, therefore the Development Standards are required for this category.

10. *The City believes staff implies that the City deliberately attempted to skew sampling results by over-emphasizing residential areas. “...the City contends that the sampling program approved by the Regional Board in the City’s original permit did properly characterize water quality conditions within the City.” (pages 7-8, reference to IV.4)*
11. *The City agrees with (the) statement (taken from the Draft Staff Report), “The original monitoring program required sampling at prescribed sites for predetermined constituents. The results were mixed, in terms of usefulness for determining pollutant sources.” (page 9, reference to VIII)*

Response to Comments No. 10 and 11 – Regarding the City’s comments concerning the appropriateness of sampling locations under the prior permit, Regional Board staff did not intend to imply that the City deliberately skewed sampling results, and agrees that the City and Regional Board staff worked together to develop sampling locations during the prior permitting cycle.

As the City correctly pointed out, land conditions have changed since the initial monitoring program was created, and there has been extensive residential construction adjacent to the creeks with the greatest concentration of sample locations. As with any monitoring program, data analysis may indicate a need to alter the program, particularly if

⁵ see Finding No.15 of Order.

the input variables change. Analysis of the last four years' of data revealed marginal results in terms of usefulness for guiding the City's efforts. Because of the changed conditions, and the inconclusive results, it is justifiable to reevaluate the sampling program altogether, including the sample locations. The initial monitoring program was based on a hypothesis of concentrating sample sites on the more pristine stream reaches in order to keep a careful check on these areas. In analyzing the past data, we have learned that the multiple points were more often redundant and did not provide the City with an abundance of data to guide or support the City-wide storm water program. Therefore, the benefits received by the concentrated sample points did not outweigh the costs of maintaining all of these locations. This observation/conclusion is not meant to be critical to the originators of the initial sampling plan, because there is always benefit in learning from past programs and experiments, including when the final outcome varies from expectations. Based on knowledge gleaned (both what did and did not work) from the previous sampling program, Regional Board staff have concluded that it may be more advantageous to locate sample points such that they may provide a comparison of inflowing versus receiving water quality on all major stream reaches, and account for all land uses.

From Comments No. 10 and 11, it is unclear whether the City believes that the sampling program over the last five years yielded conclusive or inconclusive findings. The City has not provided a summary of findings from the sampling program, nor has it requested any changes or modifications to the sampling program over the previous five year permit term. Regional Board staff met with City staff several times during the drafting of this Permit and its attachments, and discussed specifically the flaws that Regional Board staff saw in the existing sampling plan. Regional Board staff verbally suggested modifications to the sampling program

during the meetings. The City staff appeared to agree with the initial analysis of sampling program flaws, and did not offer evidence (verbal or otherwise) that the existing program had provided any conclusive data.

12. The City asserts that the Staff Report fails to acknowledge that the Reference Station is located several miles upstream of the City, and that Gabilan Creek flows through non-City jurisdiction lands prior to entering the City. (page 8, reference to IV.6)

Response to Comments No 12 –These statements are inconsistent with the actual information and analysis contained in the Staff Report. First, Regional Board staff conducted an analysis of the City's sampling data, and began the analysis by setting a hypothesis that compared inner-City sample results against the City's Reference Site water samples. If left with only this analysis, the results would indicate that there are significant urban pollutants entering the receiving water. However, Regional Board staff very specifically did not stop with this initial analysis. The Staff Report states,

From this data, one might hypothesize that there are significant urban sources for the analyzed parameters. Regional Board staff conducted further analysis on the water quality data, in order to evaluate this hypothesis. Each of the inter-city stream reaches has one sample site at the upstream City boundary. The furthest upstream site is actually a more accurate indicator of water quality entering the City than the Reference Station. Staff summarized the trends in water quality measurements over each of the stream reaches by comparing the upstream to the downstream sampling values. Table 3 (following page) shows the results. (emphasis added)

Regional Board staff did acknowledge the limitations of using the "Reference Site," and concluded that this portion of the existing water quality monitoring program was not providing useful data, and therefore necessitated a change in the Proposed MRP (i.e., to include more relevant reference sites to match the multiple waterways being sampled). Regional Board staff discussed this point, and others, at the second meeting with the City, prior to drafting the Permit.

13. *The City is unclear how the sampling results could have driven changes in the draft permit since the sampling results were collected after the draft permit was released. (page 7, reference to Staff Report Page 7; see also page 9, carryover paragraph)*

Response to Comment No. 13 - The Proposed Permit's Monitoring and Reporting Program requires significant changes in the water quality sampling locations and constituents sampled, based on Regional Board staff's growing concern with the sampling program. The Proposed Permit MRP changes are described in this Staff Report, were discussed in several meetings with City staff, and reflect concerns with: 1) the sampling locations; 2) the lack of conclusive water quality trends in over half of the samples analyzed; 3) the concentration of water sample sites primarily on three (3) short creek segments within the City; 4) utilizing one Reference Site that, due to its location, does not characterize water entering the City; and 5) relying on pre-determined sampling constituents without utilizing toxicity testing to determine the true effect of storm water discharges on aquatic life. Regional Board staff felt, and the City staff agreed, that the current sampling program was not the City's best use of resources, and did not promote locating and eliminating pollutant sources (the primary purpose of the sampling program).

14. *The City states that in the Staff Report Table 3 "For the creeks examined, except for Gabilan Creek, the analysis found either a decrease in*

pollutants as the samples moved downstream, or that water quality conditions were being maintained." The City concludes by charging Regional Board staff with having a post-hoc criticism of the City's sampling program. (page 8, reference to IV.6, bottom of page)

15. *The City states that Staff had a pre-conceived notion that the analysis would show an increase in pollutants as the creeks move through the City, and "when the analysis did not bear this out, staff concluded that the only explanation is that the sampling program...was flawed." (page 9, reference to VIII)*

16. *The City states, "Given the results of the City's monitoring program, (which show that of the water sites sampled, the City has either maintained or improved water quality for 61% of the creek reaches within City limits over the past five years)..." (page 2, section 2)*

Response to Comment Nos. 14, 15 and 16 – These statements are misleading, or incorrect. Regional Board staff did have misgivings about the sampling program based on findings from the first four Annual Reports. Regional Board staff discussed these concerns with City staff at a 2000-2001 Annual Report review meeting, and when drafting the new permit. However, rather than creating the MRP based on a "preconceived notion" of the existing program data, Regional Board staff analyzed the data, arrived at an initial hypothesis to explain the findings, then conducted further analysis to conclude that the initial hypothesis was incorrect. The data analysis methodology described meets with the accepted scientific method of hypothesis testing, and disproving an initial hypothesis is considered a more valid result than proving an initial hypothesis.

The Staff Report conclusion to this data analysis reads, "In 11 out of 28 cases (39%) the creek-parameter summaries showed definite trends (Increase or Decrease) over the creek reaches...Conversely, 61% of the

analyses were inconclusive or showed no change over the length of the creek.“ (emphasis added). The sampling results were inconclusive, meaning that no definite trend (increase or decrease) could be determined. This is contrary to the City’s statement that water quality was maintained or improved. Where water quality “showed no change,” the issue becomes whether poor water quality was maintained throughout the city, or whether good water quality was maintained. Again, the data does not support the City’s conclusion that in 61% of the samples, water quality was improved or maintained at a presumably appropriate quality level. Regardless, the salient point of the analysis is that less than half (39%) of the samples provided any evidence of whether there were urban pollutant sources, or whether the City’s BMPs were effective in removing pollutants. Regional Board staff considered this to be too low a rate of return to justify keeping the current monitoring program in place, as discussed in the Staff Report sections IV.8, and VIII.

17. The Draft Permit imposes “generic requirements” that are not supported by findings showing the City’s impact on water quality. Findings 13 – 15 address general storm water discharge characteristics, but do not specifically characterize Salinas storm water discharges (page 2, section 1 and page 4)

18. The City claims that “there is no nexus between the permit requirements and the City’s discharge” (page 2, section 2)

Response to Comment No. 17 and 18 – As discussed above and in the Staff Report, the past five years of City-based sampling did not reveal adequate definitive information on the City’s water quality impacts. To Regional Board staff’s knowledge, no other inner-City data exists that can determine conclusively what the City’s impacts are. The Regional Board and other agencies and volunteer groups have regional data on receiving water quality. However, due to the fact that there are multiple, non-City dischargers to the

regional waters, and that the sampling programs are regional by nature, these programs will not provide the detailed, inner-city analysis to establish Permit requirements. As such, the Permit, like the Phase II Storm Water Permit, rely on the wealth of knowledge taken from other city’s findings and permits, numerous studies, and the basic principles of hydrology, geomorphology, and biology, in determining the likely discharge characteristics from the City of Salinas.

Additionally, 40 CFR 122.26(d)(2)(iii)(A)(3) recognized that there are specific pollutants which are commonly associated with urban runoff, and it is reasonable to expect a city to sample for urban-associated pollutants, even if there is not local data indicating these pollutants were in a city’s storm water.

19. The City believes there is a need to better support the Staff Report’s statement that “The Proposed Order is modified from the existing permit, as a response to changes in the Federal storm water program, California (sic) 9th Circuit Court decisions, analysis of the past five years’ sampling results, and lessons learned from implementation of the initial permit.” (page 7, reference II.A)

Response to Comments No. 19 – The Staff Report, Section II.A states that “the most significant changes in the Proposed Order include modifications of the City’s Storm Water Management Program (SWMP) and of the City’s Monitoring and Reporting Program (MRP).” As described in detail above in the response to comments, the modifications required of the City’s SWMP parallel, and are based on the requirements of the SUSMP decision, relevant language in the Phase II Storm Water Permit and Fact Sheet, EPA guidance, and materials that other permittees have developed. In addition, the Court of Appeal recently upheld the iterative process for meeting water quality objectives in *Building Industry Association of San Diego County v. State Water Resources Control Board*.

20. *The City claims "...the draft permit does not take into account precipitation, soil composition, receiving water quality, or sources of pollutants not under the City's control." (page 2, section 1)*

Response to Comment No. 20 - The Permit Attachment 4 does take into consideration local precipitation, soil composition (as it relates to erosion factors, which is relevant to this item). Attachment 4, Section III.a.i.5 requires developers to analyze and project expected sediment loads from local sites and use this data to choose appropriate BMPs for mitigation. Sections III.a.i.8 and III.c.iii and iv require the City to create Development Standards based calculations using local rainfall data in order to get proper BMP designs.

The Permit does consider, in several ways, water quality and pollutant sources that are not under the City's control. First, the Monitoring Program (Attachment 5 of the Permit) requires background site water sampling results, and water and sediment toxicity test results be compared to receiving-water-body and inner-urban site samples. Follow up requirements are based fully or in part on the findings of that comparison. If receiving water site sediment or water samples are found to be toxic, the Discharger is required to report on, among other things, its jurisdiction over the suspected pollution sources. The Regional Board will take this information into consideration when making a determination of follow up actions.

21. *The City claims that "the permit makes no attempt to demonstrate how the permit conditions will result in advancing the goals of the Regional Board's Basin Plan." (page 2, section 2)*

Response to Comment No. 21 - The primary goal of the Water Quality Control Plan, Central Coast Region (Basin Plan) is to achieve "the highest water quality consistent with maximum benefit to the people of the State." The method of protecting storm water quality runoff from potential pollutants is to

require BMPs be applied to the MEP standard. The Proposed Permit does just that. The Proposed Permit MRP also requires the storm water sampling plan be modified if storm water samples exceed Basin Plan water quality objectives, thus taking into consideration the Basin Plan goals.

22. *The City concludes that the Permit should be delayed until the City and Regional Board could develop and implement a "mutually acceptable sampling program." Based on the results of the sampling program, then the Regional Board could write a Permit that would contain additional appropriate BMPs. (page 9, Conclusion)*

Response to Comment No. 22 -Permittees must implement Best Management Practices (BMPs) that reduce pollutants in storm water runoff to the technology-based standard of Maximum Extent Practicable (MEP) to protect water quality. There is no basis to presume that the City could or should delay implementing BMPs that comply with the Phase I stormwater requirements, as interpreted by the State Board, EPA and the courts. The City's past four years of sampling data did not reveal enough information to definitively determine the City's pollutant types and sources. Because of the flashy nature of urban storm water runoff, it is extremely difficult to get a perfect picture of urban discharge characteristics. Developing this perfect picture would be more time consuming and costly than complying with the permit. For these reasons, it is much more feasible, acceptable, and cost effective for the City to consider the logical, typical pollutant sources, address those sources with BMPs, apply a general sampling program that relies on background versus receiving water comparisons, and finally, add incremental sampling as necessary to "research" known polluting areas of the City.

23. *Response to specific comments listed on pages 4 – 6 of the City's letter (please refer to attached letter, Attachment 4):*

a. *Finding 4 – Order Finding No. 22 was*

- added and incorporates all attachments referred to in the Order.
- b. *Finding 6* – Regional Board staff disagrees with this statement because the sentence reads, “...Regional Board encourages...”(emphasis added) rather than making the item a requirement.
 - c. *Findings 13 – 15* – See response to comments above.
 - d. *Finding 16* – MEP section was changed to include explanation of the Regional Board’s role in determining compliance with MEP.
 - e. *Paragraph A.5* – changed in Order
 - f. *Paragraph A.7.b* – Regional Board staff disagrees with suggested editing change.
 - g. *Paragraph A.8* – changed in Order
 - h. *Paragraph B first sentence*– reference was added in the Order.
 - i. *Paragraph B second sentence* – no change requested. It is unclear how the City’s reference to their letter’s Footnote 2 applies to this section of the Order.
 - j. *Paragraph C.3.a* – The Permittee points out that it cannot regulate discharges outside of its jurisdiction. However, if discharges from outside its jurisdiction cause the Permittee’s discharges to cause or contribute to water quality exceedances, then more stringent BMPs may be necessary through the iterative process. In addition, illicit discharges to the MS4 are within the Permittee’s jurisdiction.
 - k. *Paragraph D.1.a.ii and iii* – conditions were combined
 - l. *Paragraph D.1.a.iv* – Draft Paragraph D.1.a.iv (now D.1.a.iii) requires the City to “secure the resources necessary” to meet Permit requirements. Unlike the requirements at issue in *Cramer v. City of San Diego* (1958) 164 Cal.App.2d 168, the Permit does not require the City to do so in any particular manner. The City can meet this requirement in any way it chooses, including by developing interagency agreements or other regional programs that do not necessarily involve the City’s fiscal management. The Regional Board has the authority to require a determination that a permittee possesses the resources necessary to meet permit requirements as a condition of granting the permit. This is consistent with the storm water regulations, which require an initial application to identify funding sources for the storm water program. (40 CFR §122.26(d)(2)(viii).)
 - m. *Paragraph D.2.a* – cross-reference was omitted.
 - n. *Paragraph D.2.b, first sentence* - section was revised
 - o. *Paragraph D.2.b, second and third sentence* – Receiving Water Limitation C.3 defines the iterative process used to comply with numeric water quality objectives. This section will be retained.
 - p. *Paragraph D.2.e* – there is no paragraph with this reference
 - q. *Paragraph E.2* – It is not the practice of the Regional Board’s Executive Officer or staff to require changes to monitoring and reporting programs (MRPs) without prior notice to the discharger. In the exceedingly unlikely event that this happens, the Permittee already has the ability to seek review by the State Board (see California Water Code section 13320) and/or the superior court (see California Water Code section 13330). The Permittee may also request either the Executive Officer or the Regional Board to reconsider any revisions to the MRP. Monitoring and reporting requirements are also subject to procedural due process requirements. (*Machado v. SWRCB* (2001) 90 Cal.App.4th 720.) These requirements entitle the Permittee to provide input before or after the Executive Officer makes the revisions, depending on the magnitude of the changes and other factors discussed in *Machado* and other relevant caselaw.
24. *The Draft Permit’s requirements impose an unfunded state mandate, which violates the California Constitution. (page 3, section 4)*

Response to Comment No. 24 - The State Board has already considered and rejected the argument that storm water management or other NPDES permit requirements violate Article XIII B, Section 6 of the California Constitution due to the exception for federally mandated programs that the City cites.

(SUSMPs Order at 15; Order No. WQ 90-3 (San Diego Unified Port District).) The Regional Board and the State Board must implement the NPDES program in a manner consistent with 33 U.S.C. 1342(p)(3)(B)(iii), which requires implementation the maximum extent practicable standard and, in some cases, more stringent standards to control pollutants. The State has no choice to ignore these requirements. The State Board did not impose requirements in excess of the federal requirements in its discretion; it merely determined that the *federal* requirements mandate the Attachment 4 controls to satisfy MEP.

Proposition 1A did not change this result for two reasons. First, it only applies if a cost constitutes an unfunded state mandate in the first place. (Cal. Const., Art 13B, §6(b).) Second, it requires an appropriation only for those unfunded state mandates for which there has already been a determination by the Commission on State Mandates and the Controller that the State must fund the local entity's costs. (Id.) Neither of these applies.

The storm water program is also not an unfunded mandate because the City has authority to collect fees to pay any increased costs. (Cal. Gov. Code § 17556, subd. (d); *Connell v. Superior Court* (1997) 59 Cal.App.4th 382.)⁶

25. *The Draft Permit imposes requirements that go beyond the Board's regulatory authority. Specifically (pages 3-4, section 5):*

- a. *The Regional Board does not have the legal authority to require the City to amend their CEQA procedures, and;*
- b. *The Regional Board cannot require the City consider storm water management*

whenever the City updates certain General Plan elements.

Response to Comment No. 25 - Section III.g of Attachment 4 requires the City to develop procedures to ensure consideration of storm water quality impacts during CEQA reviews. This requirement is not inconsistent with the CEQA Guidelines. The SUSMPs Order approved a provision that required the permittee to consider storm water when approving discretionary projects. (Order No. WQ 2000-11, p. 26.)

The Permit does not impermissibly infringe on the City's ability to carry out its land use planning authority and responsibilities. Both the Clean Water Act and California law anticipate that local land use planning and zoning will be carried out on the municipal level. (See 33 U.S.C. § 1251(b) (preserving state's primary responsibilities and rights to plan development and use of land resources). However, the Regional Board staff disagrees that the Permit amounts to land use planning. Like the ability of USEPA to approve total maximum daily loads (TMDLs) and to establish the regulatory framework in which subsequent land use decisions will be made, the Permit is an appropriate regulatory function. (See, e.g., *Pronsolino v. Marcus* (N.D. Cal. 2000) 91 F.Supp.2d 1337, 1355-1356; *aff'd*, *Pronsolino v. Nastri* (9th Cir. 2002) 291 F.3d 1123, 1140; *cert den.* 539 U.S. 926 (2003).) The Permit places no constraints on what land uses the City may authorize within its jurisdiction. Further, the Permit does not dictate how the City may zone its jurisdiction. Simply put, there is no land use planning or zoning done by the Regional Board through the Permit.

These two provisions do not invade the fundamental, municipal choice to make land use decisions and zone accordingly. As with many other Federal or State permitting and regulatory functions, the Permit simply provides contours around which the City must carry out their land use and zoning responsibility. In fact, the two challenged provisions merely require the City to develop a process to *consider* storm water impacts and

⁶ *Connell* did not consider whether Proposition 218 would affect the court's conclusion (*id.* at 403), but it clearly would not. The City could either impose a use-based fee (*Howard Jarvis Taxpayers Ass'n v. City of Salinas* (2002) 98 Cal.App.4th 1351) or submit a property-based fee to the voters.

what actions it should take in response. The requirements to consider CEQA mitigation is consistent with the State Board's recommendation in the SUSMPs Order to consider regional solutions or mitigation banks to reduce compliance costs.

C. The Ocean Conservancy, in conjunction with the Natural Resources Defense Council, comment letter, December 23, 2004 (Attachment 10 of this Staff Report). The comments and responses are as follows (comment numbering continued from above):

26. *"The permit must require compliance with water quality standards in receiving waters – beyond the Maximum Extent Practicable standard..."*

Response to Comment No. 26 – The Receiving Water Limitations, Section C of the Proposed Order prohibits violation of water quality standards in receiving water. Section C.3. describes the method by which the permittee shall meet the discharge prohibitions and receiving water limitations. The method described in Section C.3. is equivalent to State Water Resources Control Board precedential Order WQ 99-05 and the provision of the Court of Appeal recently upheld in *Building Industry Association of San Diego County v. State Water Resources Control Board*.

27. *The Regional Board has not provided the public with the proposed ROWD.*

Response to Comment No. 27 - Sarah Newkirk, the comment letter's co-author from the Ocean Conservancy, emailed the Regional Board staff and requested the ROWD on December 21, 2004. Regional Board staff promptly responded via email on December 22, 2004 that the ROWD was available for review at the Regional Board office, and consists of a Form 200, and the fourth year SWMP. This ROWD application is consistent with the EPA "Interpretive Policy Memorandum on Reapplication Requirements for Municipal Separate Storm Sewer Systems," 61 Fed. Reg. 41698 (Aug. 9, 1996). See also, Response to Comment 32, below.

28. *"...the Permit findings, definitions, and*

all program requirements should be modified to be consistent with other Phase I permits—in particular, the recently upheld San Diego Permit in Building Industry Association." And later, "In particular, because the California Court of Appeals has recently upheld the San Diego municipal permit, the San Diego permit serves as a model for designing this permit to effectively control polluted urban runoff."

Response to Comment No. 28 - The commenters are unclear which "findings, definitions and ... program requirements" of the Salinas Permit are inconsistent with the San Diego permit or with *Building Industry Association of San Diego County v. State Board* (2004) 124 Cal.App.4th 866. The only provisions at issue in *Building Industry Association* were the requirements to meet water quality standards through an iterative process. The Salinas permit includes the same requirement and the same process. If the commenters are suggesting that the provisions of the Salinas SWMP must be the same as those in the San Diego SWMP, Regional Board staff disagrees. *Building Industry Association* held that since the Clean Water Act does not define MEP, it was proper for the Regional Board to define MEP in the permit:

... As broadly defined in the [San Diego MS4] Permit, the maximum extent practicable standard is a highly flexible concept that depends on balancing numerous factors, including the particular control's technical feasibility, cost, public acceptance, regulatory compliance, and effectiveness. This definition conveys that the Permit's maximum extent practicable standard is a term of art, and is not a phrase that can be interpreted solely by reference to its everyday or dictionary meaning. Further, the Permit's definitional section states that the maximum extent practicable standard "considers economics and is generally, but not necessarily, *less* stringent than BAT." (Italics added.) BAT is an acronym for "best available technology

economically achievable,” which is a technology-based standard for industrial storm water dischargers that focuses on reducing pollutants by treatment or by a combination of treatment and best management practices. [Citation omitted.] If the maximum extent practicable standard is generally “less stringent” than another Clean Water Act standard that relies on available technologies, it would be unreasonable to conclude that anything more stringent than the maximum extent practicable standard is necessarily impossible. In other contexts, courts have similarly recognized that the word “practicable” does not necessarily mean the most that can possibly be done. [Citations omitted.]⁷

A discussion of MEP is also provided in the Phase II General Permit Fact Sheet:

The MEP standard applies to all regulated MS4s, including those in Phase I and Small MS4s regulated by this General Permit. Consistent with U.S. EPA guidance, the MEP standard in California is applied so that a first-round storm water permit requires BMPs that will be expanded or better-tailored in subsequent permits. In choosing BMPs, the major focus is on technical feasibility, but cost, effectiveness, and public acceptance are also relevant...

Generally, in order to meet MEP, communities that have greater water quality impacts must put forth a greater level of effort. Alternatively, for similar water quality conditions, communities should put forth an equivalent level of effort. However, because larger communities have greater resources (both financial resources as well as existing related programs that can help in

implementing storm water quality programs), it may appear that they have more robust storm water programs. Additionally, because storm water programs are locally driven and local conditions vary, some BMPs may be more effective in one community than in another. A community that has a high growth rate would derive more benefit on focusing on construction and post-construction programs than on an illicit connection program because illicit connections are more prevalent in older communities...

Many Phase I MS4s have been permitted under storm water regulations for more than ten years and have had that time to develop programs intended to reduce pollutants in their storm water discharge to MEP... many of the lessons learned and information developed by Phase I communities is available to smaller communities as a guide...

From the above discussion it is clear that what constitutes MEP will vary depending on the community, the water quality impacts, and the length of time that a permittee has been regulated. The MEP standard does not require that all Phase I communities must have identical programs. Each SWMP must be judged within the context of the implementing permittee’s situation, resources, and potential water quality impacts. In considering whether a BMP’s cost is reasonable, the Regional Board should also consider the cost of any impairments from storm water runoff, such as the impacts of beach closures on the local economy.⁸

The initial framework of the Salinas Permit was provided by Tetra Tech, Inc. under contract to the USEPA. Tetra Tech, Inc. is a national corporation with vast experience in reviewing all aspects of storm water permit programs in states across the U.S. Regional

⁷ *Building Industry Ass’n of San Diego County v. State Board* (2004) 124 Cal.App.4th 866.

⁸ State Board Order No. WQ 2000-0011 (City of Bellflower et al.).

Board staff utilized Tetra Tech, Inc.'s Salinas Permit framework, consulted storm water permits from the Cities of Sacramento, San Diego and Ventura, reviewed conclusions from the Salinas City Storm Water Permit audit conducted in 2003, participated in multiple discussions with Salinas City staff and management to determine limitations, needs, and concerns with the current storm water management program, and reviewed storm water regulations, court decisions, and the Phase II General Permit. This complex array of information was combined and refined to create this Order. Consequently, this Permit is, at a minimum, a compilation of multiple Phase I permits, input from local and nationally based experts, observations and analysis of the current Salinas storm water program, governing regulations and applicable State Board orders (including State Board Order No. WQ 2000-11) and court rulings. Comparing the Salinas Permit to only the San Diego permit would be under utilizing the available information.

29. *"...the broader purpose of a MRP...(is) to ensure that water quality is protected by the permit. The MRP is clearer about this more critical objective later. However, it is an important point to make initially and unambiguously, as it highlights the need for adaptive changes to the permit if monitoring results demonstrate inadequacies in the protections provided in the permit."*

Response to Comment No. 29 - The MRP Section B.1 states the multi-faceted purposes of the program, concluding with "Assessing the overall health and evaluating long-term trends in receiving water quality." Regional Board staff agrees that an important goal of the MRP is to ensure that the Permit's requirements are adequate to protect water quality. The Storm Water Management Program must be revised per the Permit's Attachment 4 requirements if it does not meet applicable standards, including MEP. Staff disagrees that *permit* revisions would be necessary because the permit already requires the necessary revisions via the SWMP.

30. *The commenters request more explanation*

as to why the number of sampling sites was reduced compared to the 1999 Salinas Permit MRP.

Response to Comment No. 30 - Table 5 (following page) provides a very condensed listing of the number of sites and type of sampling required for the existing 1999 Permit, and the 2005 Permit. The commenter is correct in noting that the number of sites has decreased, however the salient point is not how many sites are used, but what the quality of data is from each site individually, and from the monitoring program as a whole. As discussed in depth in the City of Salinas Response to Comments No. 10 – 16, the quality of data gleaned from the 1999 sampling program did not justify retaining the number or location of the sampling points. The basic principal of the 1999 MRP was to attempt to pinpoint pollutant sources within the City by utilizing an intensive City-wide sampling array with pre-determined constituents. The 1999 program also did not analyze each year both wet season and dry season water quality. After four years of data collection, the City was unable to utilize the monitoring data to tailor the BMP and pollutant source control efforts, and could draw few solid conclusions from the data.

The 2005 MRP is aiming to look at a "bigger picture" by designing the program to first determining what, if any, effect urban runoff has on the receiving waters. To do this, the sampling points are located on streams as they enter and leave the City. Sampling constituents parallel those used in other regional sampling programs. The 2005 MRP requires a comparison analysis between inflowing and exiting water quality twice yearly. The 2005 MRP also relies on toxicity and benthic invertebrate studies to determine impacts on the living environment, and to capture possible synergistic effects of storm water pollutants. Based on the data, it should become clear if the City is contributing significant pollutants to the receiving waters. The 2005 MRP also requires the City calculate pollutant loads using pollutant concentration and stream flow measurements. The City must then investigate the location and pollutant sources.

Although the sheer number of samples is not in and of itself indicative of the quality of a sampling program, the table below summarizes the number of required samples in both the 1999 and the 2005 MRP. Although the actual number of sample points (see table, row 2) in the 2005 MRP (four or eight sites) is decreased from the 1999 MRP (21 sites), the minimum number of samples taken in each plan is comparable: 32 samples in 2005 MRP compared to 42 samples in 1999 MRP (see table, row 4). The 1999 MRP maximum number of samples can reach to 80, but at the expense of losing sediment and bioassessment studies. It should be noted that the 1999 MRP samples include a Reference Station that was so far from the City, and was upstream of other human-based land uses, that the site was deemed a poor reference source and provided no useful data for this program. And, as discussed above, the 1999 MRP sites focused heavily on one land use type, and were so

concentrated in one segment of the City as to limit the usefulness of the data for assessing the City-wide program. Regional Board staff provide this analysis to demonstrate that “more monitoring is not necessarily better monitoring,” i.e., a decrease in sampling stations will not necessarily result in a “less comprehensive monitoring program.”

The 2005 MRP requires water toxicity studies four times per year (see row 3), which will provide an indication of the aquatic life impacts, which may result from individual pollutants, or from the combination of multiple pollutants acting or interacting together. The 1999 MRP did not look at water toxicity, and thus was unable to fully assess impacts to aquatic life. In conclusion, the sample locations, and the required sample analyses, not the number of sample locations, are a better determinate of the quality of the MRP.

TABLE 5		
Table Row	1999 Permit	2005 Permit
1	21 sites: 6 on Gabilan Creek 6 on Natividad Creek 4 on Santa Rita Creek 4 on the Reclamation Ditch 1 Background (native) water site	4 sites required: 3 receiving waters 1 background (upstream) water 4 additional sites: Urban Discharge sites if needed
2	Sample all sites, 1/yr or 2/yr*: In-situ Lab *depending on if conducting sediment or bioassessment tests	Sample Background + Receiving water sites (4 sites total): In-situ 2/yr Lab 2/yr Water toxicity 4/yr – twice in wet season, twice in dry season Bioassessment tests conducted annually
3		Urban Discharge sites (4 sites total): Quarterly visual monitoring In-situ 1 / year if indicated by receiving water samples Lab 2 / year if indicated by receiving water samples
Total Minimum Number of Sites Sampled		

4	Minimum Total = 42 samples	Minimum Total = 32 samples per year
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31. *“We agree that coordination between the MRP and the Agriculture Waiver Program would be both logical and efficient” The commenters are concerned that the Salinas MRP provides for less frequent monitoring of fewer constituents than the Agriculture Waiver Program, and request a more clear description of how the two sampling programs are correlated .”*

Response to Comment No. 31 - The monitoring frequency is addressed in Response to Comment No. 29, above. The commenters’ concern about the number of constituents is without merit. There is a close correlation between the sampled constituents of the two programs. The 2005 MPR requires wet weather monitoring of 18 parameters or other water quality indicators (not including toxicity or invertebrate studies), as shown on Table 1 of the MRP. The Irrigated Agriculture Waiver Program monitoring program requires monitoring of 10 parameters or other water quality indicators (not including toxic or invertebrate studies). Eight of the 10 Irrigated Agriculture Waiver Program sample items are included in the MRP. The two items that were omitted from the MRP include “Chlorophyll a” and “Dissolved Oxygen”. These two items were considered essential indicators for the Agriculture issues. However, Regional Board staff found that these two constituents were not included in the Urban Watch or the First Flush monitoring programs, were not included in the Phase II Permit list of “pollutants of concern,” and concluded that these two constituents were not essential to answer questions surrounding urban runoff impacts.

The water and sediment toxicity studies and benthic invertebrate studies of both programs are identical to each other in timing and sample methodology.

32. *“...the MRP should be clear that use of supplemental monitoring data does not*

relieve the permittee of any of its monitoring responsibilities under the permit.”

Response to Comment No. 32 - The word “supplemental” is synonymous with “additional,”⁹ however, the MRP Section B.1.d has been amended with the following addition, “The permittee may not use supplemental data in lieu of performing monitoring required by this Monitoring and Reporting Program, but may use supplemental data to augment, explain, confirm or otherwise augment the permittee’s own monitoring.”

33. *“In Environmental Defense Center, the Ninth Circuit emphasized that a storm water management plan, which ‘contain[s] the substantive information about how the operator of a [MS4] will reduce discharges’ is an inherent part of the storm water permit. Under 40 C.F.R. section 122.26(d)(2) permittees must submit a detailed proposed management program. Although Attachment 4 provides the SWMP requirements, the public has not been provided a copy of the SWMP as proposed by the permittees. As such, we request that the proposed SWMP be made available to the public and we reserve our rights to submit comments on the proposed SWMP once it has been made available.”*

Response to Comment No. 33 - *Environmental Defense Center v. EPA (9th Cir. 2003) 344 F.3d 832*, dealt with initial applications for general permits under Phase II of the MS4 program. *Environmental Defense Center* does not require a permitting authority to review SWMP revisions before issuing an individual Phase I permit, as opposed to requiring the permittee to revise and update the SWMP periodically. The process that the Salinas permit requires is consistent with the EPA “Interpretive Policy Memorandum on

⁹ The Random House College Dictionary, 1980

Reapplication Requirements for Municipal Separate Storm Sewer Systems.” The Policy Memorandum specifically states that section 122.26(d)(2)’s application requirements do not apply to reapplications.

Under Attachment 4 to the Permit, either the Regional Board or the Executive Officer must approve the revised SWMP after the permittee submits it. The revised SWMP is due 180 days after permit adoption. The Regional Board will provide any necessary or appropriate public participation process at that time. However, consistent with State Board Order No. WQ 2000-11 and the Chief Counsel’s December 26, 2000 Memorandum (cited below), Attachment 4 does incorporate the appropriate SUSMPs requirements into the permit, and the Regional Board has provided both a 30-day comment period and a hearing on these requirements. Staff notes that we have received no objections to any specific provisions of Attachment 4, except from the City of Salinas.

Attachment 4 makes the Permit significantly different than the notice of intent (NOI) that *Environmental Defense Center* reviewed. In that case, the permit contained no substantive storm water controls, and EPA did not review or provide a comment period on the SWMPs, which were the *only* source of substantive controls. In contrast, Attachment 4 of the Permit does incorporate substantive pollution control requirements into the Permit. (See also, *Natural Res. Def. Council v. EPA* (9th Cir. 1992) 966 F.2d 1292, 1308 n. 17 and accompanying text, noting that NPDES permit writers would review substantive pollution controls in Phase I permits and decide if they were adequate.)

However, in order to maximize public participation opportunities, Attachment 4 has been revised to add the following public comment requirement to the end of section I.a: “Interested persons shall have 30 days to comment on the revised SWMP prior to RWQCB or Executive Officer approval.” The Regional Board will decide at the time of approval whether a public hearing is necessary or appropriate.

With respect to the commenters’ reservation of rights, the public comment period for the Permit, including Attachment 4, ended on December 30, 2004. Public comments on the revised SWMP will be limited to whether the revised SWMP complies with Attachment 4 and, where the City is required to select among various BMPs, whether the City’s suite of BMPs satisfies the MEP standard.

34. *“...because the Board proposed to approve the permit prior to the development of the (SWMP), it is not clear yet whether the development standards proposed will be consistent with the SUSMP provisions.”*

Response to Comment No. 34 – See Response to Comment 32. To increase clarity, the SWMP Revision Requirements, Attachment 4 of the Proposed Permit, Section III.b. has been revised to read, “~~To ensure consistency~~The DSP must be consistent with the applicable portions of State Board Order WQ 2000-11. To ensure consistency with Order WQ 2000-11, the DSP shall provide...”

35. *Specifically, the Chief Counsel of the State Board expressly notified all Regional Board Executive Officers that: ... [M]unicipal storm water permits must be consistent with the principles set forth in [Order WQ 2000-11]. The Order finds that the provisions of the SUSMPs, as revised in the Order, constitute MEP.*

Response to Comment 35 – Attachment 4 is consistent with the Chief Counsel’s December 26, 2000 memorandum, which provided limited discretion to regional boards regarding, among other things, changes to design standards due to such factors as rainfall and soil characteristics, waivers from design standards, the types of future developments to include, and regional solutions. The Chief Counsel’s memorandum states that SUSMPs requirements *should* be included in the permit. Attachment 4 complies with this suggestion. Moreover, the order that the State Board considered in Order No. WQ 2000-11 is now over five years old; for the reasons discussed in Response to Comment 27, it would be inappropriate to rely only on that regional

board order.

36. *“The basis for anti-degradation analysis in this case is the effect of the permit, not the effect of the BMPs...The Board should insist on a proper anti-degradation analysis before approving this permit.”*

Response to Comment No. 36 - Regional Board staff agrees that the basis for applying the anti-degradation analysis is the effect of the discharges that will occur under the permit. However, the permit includes BMP requirements to ensure that the anti-degradation policies are satisfied. In particular, the requirements of Attachment 4 will reduce the potential for discharges from the MS4 to cause or contribute to the degradation of receiving water quality and improve water quality over existing conditions. The effect of the permit will be an overall improvement of receiving water quality, not degradation.

37. *The commenters disapprove of the non-storm water categories listed in the Proposed Permit at A.5. “There is nothing in either the law or regulations that even hints at this type of exception.”*

Response to Comment No. 37 – The commenter cites 40 CFR Section 122.26(b)(2) which defines “illicit discharge.”¹⁰ However, 40 CFR 122.26(d)(2)(iv)(B)(1) and the Phase II General Permit provide for some latitude in dealing with the same non-storm water discharges that are listed in the Proposed Permit. 40 CFR 122.26(d)(2)(iv)(B)(1) states that “The following categories of non-storm water discharges or flows shall be addressed where such discharges are identified by the municipality as sources of pollutants to waters of the United States.”

¹⁰ “Illicit discharge means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.” 40CFR 122.26(b)(2)

The Proposed Permit wording has been changed to match exactly this wording.

X. PUBLIC HEARING

The Regional Board will hold a public hearing regarding the proposed waste discharge order. The public hearing is scheduled for February 11, 2005, in Salinas, California. Exact location address and Regional Board hearing agenda will be posted to the Regional Board website, <http://www.waterboards.ca.gov/centralcoast/>. Further information regarding the conduct and nature of the public hearing concerning this Order may be obtained by writing or visiting the Central Coast Regional Water Quality Control Board office, at 895 Aerovista Place, Suite 101, San Luis Obispo, CA 93401.

XI. INFORMATION AND COPYING

Persons wishing further information may write to the above address or call Donette Dunaway (805) 549-3698. Copies of the proposed order and its attachments, and other documents (other than those that the Executive Officer maintains as confidential) are available at the Regional Board office for inspection and copying by appointment.

XII. RECOMMENDATIONS

Adopt Order No. R3-2004-0135, with attachments, as proposed.

XIII. ATTACHMENTS

Hard copy attachments were provided for Regional Board members. All other reviewers are directed to the Regional Board website posting:

<http://www.waterboards.ca.gov/centralcoast/>

1. Figure 1 – Sampling Locations, 1999 Permit
2. Order No. R3-2004-0135 (NPDES Permit No. CA0049981)
3. Monterey Bay National Marine Sanctuary comment letter, November 10, 2004
4. City of Salinas comment letter, December 17, 2004
5. The Ocean Conservancy comment letter,

December 23, 2004

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2004 permit\November 2004 drafts\Final\Salinas Staff
Report, 1-2005 final.doc